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HELPFUL FARM FACTS

for Wartime Production

FEB 25 1944 77



Hoffman SEED GUIDE

SPRING 1944 46th YEAR



Everybody's Pitching In

History is full of records of trying times. There has always been a way out. Sometimes not man's own way. There was often something better than he could have planned. Who knows the final outcome of all the history being made today?

One thing is known. A lot of feed . . . a lot of food . . . is needed the world over. Our country has the call to furnish a heavy part of it. Such a supply won't just happen. It has to be produced!

With all the trials that must go along with such vast production, it is mighty encouraging the way everybody's pitching in: Above, the widowed mother, her children and hired boy are carrying on their farming operations splendidly, to a degree that might have been thought impossible. Mother and daughter on front page are shown taking one part of their daily chores in stride. Many other subjects in picture and print throughout this book give the plain evidence of how folks are helping. Add it all together—and you have the spirit that's going to win this war—it won't be licked! It's America . . . at work! The same unbeatable spirit that rules our fighting men around the world.

Same as through the past 45 years, Hoffman Seeds will help too! In a year unequalled for trying situations. Very short crops of many seeds. Big demands. Transportation troubles. Brand new regulations. Help shortages. But who hasn't his own problems to handle?

There's one rule for success that always has worked—and it's working today. In seeds, for that "little patch," or hundreds of acres . . . nothing can do as good a job as the very best! And production just now dare not be hampered by sowing anything else. Other vital factors are: proper use of manure, lime, fertilizer—plus good common sense in their management.

Yes . . . here are seeds that really will help. Put them to work on your farm. If any one or more of the Farm Facts herein are of value to you—that's fine . . . that's why they're here.

If we'll all put our heads and hands and hearts together on this great big job, it's going to come out all right.

A. H. HOFFMAN, INC.
LANDISVILLE (LANCASTER CO.), PA.

Oats...How Important They Are This Year!

The vital shortage of grain feed is an established fact. In two short years, the U. S. has used up its reserves—and the big production job is still ahead. It takes about 7 pounds of grain to make a pound of pork, 2 pounds to make a gallon of milk; 100 pounds of scratch and 100 pounds of mash to produce a case of eggs. And, as the USDA points out, cows, chickens and hogs must be paid in advance.

What's the answer? If you need grain feed, you better count on growing your own. If you can produce more than you need, you'll have an eager cash market. Most corn acreage is already fixed—and limited by the extreme shortage of good seed corn. Therefore, any real increase in grain production this spring must be in Oats. There are two ways you can get this increase—and this is a good year to use both of them. They are (1) increased acres to seed, (2) increased yield per acre.

This isn't selling talk to get you to buy seed. Authorities of all sections agree on the serious situation. Farther south, where they had a disastrous drought last summer, County Agents are urging "Land that could not be prepared for small grain last fall can help increase the feed supply if it is seeded to Oats in the spring." Up in New York State, authorities believe their farmers should plant over 2,000,000 bushels of good seed Oats.

Our suggestion is that you canvass your farm for the best acreage you can put to Oats. Get good, high-germinating seed of a variety that has proved reliable. Fertilize according to recommendations of your County Agent and go after the biggest Oats crop you've ever grown!

HOFFMAN "VICTORY" OATS

NOTE: Just as this book was ready for printing, we received the following letter from Warren R. Goehring, Goehring's Poultry, Greenville, Pa. Read it! It tells you, in one short paragraph, the biggest reason we know for sowing Victory Oats this spring:

"The Victory Oats I received from you was the best seed Oats I ever planted. I didn't get a full crop (who did) because of our unfavorable season, but I do have plenty of Oats for feed, where most of my neighbors had to plow theirs down. Your seed was the reason and I want more of it next spring if you are in a position to take care of my needs."

Most of you are familiar with this high-producing strain. We went to extra trouble this year to get all the good seed we could find, for one good reason. Victory has always been a reliable producer. In good years it has yielded tremendous crops—80 bushels and more per acre . . . often showed gains of 20 bushels to the acre over its competitors. In poor Oats years, it has come through consistently with 5 to 10 bushels an acre better than many neighboring fields. It grows with a tall, stiff straw that enables it to weather wind and rain with little damage. It heads out well, with large, heavy kernels, and the thin-hulled grain is rich in feeding value. The Hoffman Victory seed is heavy, plump, comes from vigorous parentage, and is of high germination. It has been

(Continued on next page)

Home-produced grains . . . whether oats, barley, buckwheat, rye, corn or wheat . . . it's one thing to talk about feeding them. But it's often quite another thing to actually have them, in the required amounts. Of course the weather plays a big part.

Threshing time provides the answer. But months before then is the much more important time . . . the time the seed goes into the drill. What seed shall it be? Just taken from the granary, and (maybe) cleaned to a degree? Or new, dependable Hoffman Seed? Right there can be a whole lot of difference on what the threshing story is going to be.

Time to settle the seed question is right NOW . . . way ahead of seeding time. Rely on Hoffman Quality Seed. Order it right away—today. Be sure to have it on hand—ready when the right seeding-day arrives.





OATS VALUABLE IN FEED CONSERVATION PROGRAM

Recommendations to farmers who are practicing feed conservation say that Oats can be used with Corn and Barley in any desired combination for dairy feeds. For 20 per cent laying mash, one-fourth of the grain ration may be Oats. "Full Oats and Barley bins," say the authorities, "will go a long way in stretching your supply of purchased protein feeds." For poultry use, however, note that all grain supplements are deficient in calcium and phosphorus. (Photo Soil Conservation Service.)

"VICTORY" OATS (Continued)

thoroughly cleaned—and that's important for increased yield. A fair percentage of this Victory seed is Certified. The other part is not. But all of it is of good high quality. We know the source of all this seed and have every confidence in it. We will ship Certified seed to all who order it as long as it lasts, after which we will ship the Uncertified and refund the difference in cost. We announce this so you won't find yourself at planting time without any good seed.

One reason why we recommend Victory so highly is its DEPENDABILITY. When we first introduced this strain, several good Oats years in a row produced phenomenal crops—90, 95 and 101 bushels to the acre. But then came the real test—an unfavorable season. That's right where Victory showed its real ability and won fast friends among thousands of our customers. It had the ability to produce even when, as Mr. Goehring says, "most of my neighbors had to plow theirs down." Every year for the past eleven seasons the story has been the same. As far back as 1934, customers reported: "Threshed 389 bushels from 6½ acres," "79 bushels Victory per acre—only 59 bushels from my other Oats," "90 bushels per acre." In 1939 our records show "1,730 bushels from 23 acres," "93 bushels per acre"—and plenty of 80 and 90 bushel records.

Here is evidence! Here is actual experience that all leads to one conclusion. This is the year for Victory.

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No Need for High Fertilization

Oats—as well as barley, soy beans and buckwheat—seldom pay for high fertilization, but respond well to about 200 lbs. of superphosphate per acre. In the absence of recent manuring fertilize with 250 to 300 lbs. of an 0-14-7, 0-16-8 or 2-12-6. For thin soils, use same amount of 4-12-4. When a legume is sown with spring grain, however, fertilizer should be increased 50 per cent and potash should be added when it is apt to be deficient.

It is best to consult your County Agent for exact recommendations on your soil.

HOFFMAN "VICLAND" OATS

Vicland is an early maturing strain which has performed exceptionally well in Eastern test plots, and in a great many Mid-Western fields. Vicland is not classed as a tall-strawed variety though it has gained its big number of users because it produces well. Vicland shows unusual resistance to stem rust, and to leaf or crown rust and smut. Produces well-filled grains of comparatively thin hull and fine feed value. We do not have very much Vicland seed. Majority of it is of second generation-from-certified seed. A small quantity of certified seed that must be sold at a premium of 60c per bushel over the figure quoted on price list for the regular Vicland seed. If you want to experiment with a few acres, send your order early.

"PATTERSON" OATS

We are trying to get some good seed for our friends who want it. If we can get seed we can conscientiously recommend it will be listed on the price list.

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Draft of Plow Is Less With Wide Tread Tractor

Less power is required to pull a plow with a wide tread tractor than with a narrow tread machine. This discovery comes as a surprise, because agricultural engineers have generally agreed that spreading the rear wheels, necessary in cultivating certain row crops, increases the angle of pull when the tractor is used on a plow with a resulting increase in draft.

Twelve tests were run with a 2-bottom, 14-inch, right-hand plow, with the typical angle of pull of a narrow tread tractor. Twelve alternate tests were run with the angle of pull typical of a wide tread tractor.

In the first series the draft averaged 1,399 pounds and in the second, 1,335 pounds. This difference in pull is worthy of attention by practical farmers.

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HOFFMAN WINTER WHEAT AND BARLEY

Now growing under Hoffman supervision—ready for you next August—is some splendid true-to-name seed. Plan for it now—let's talk it over around harvest time—we can show you it will pay you.

SWEDISH TYPE OATS—Variety Unknown

Looking back through all these 45 years of Hoffman seed business . . . one of the variety names that has gained an outstanding number of lasting friends is Swedish Oats, and in 1943 there was still a great call for this seed. There will be a very heavy call in 1944. The reasons are obvious. Here is Swedish Type Oats of sound quality that has been tested for high germination. Thoroughly cleaned of foul weeds. . . . And priced at a figure that is certainly not a great premium over the cost of ordinary feeding oats on some markets.

The original "Swedish Select" Oats that came from the country indicated by its name had two exceptional merits—ability to produce heavy yields and a widespread root system which greatly aided its yielding ability. True, this stock of seed is several generations from the original . . . and doubtless has gained some admixture of other strain seed since. Therefore, to be in compliance with current regulations, the words "Variety unknown" are added to our description of this seed. But good characteristics have a decided tendency to stick, and we have every confidence in the ability of this seed to please its users . . . from the standpoint of yield and other traits as well.

Here is maturity on the medium toward early part of the season. Resistance to overcome storm damage. Possessing good root structure. Firm, tall straw. Good stooling ability. Is of the branching or tree type. This Swedish type seed has, through these many years, earned a permanent place on many Eastern farms. Is recommended as capable of doing a good job for old or new users. Time to order is early . . . very early insures your having your seed, and in time. See price list.

To get an even better Oats yield—use "Ceresan" on your seed. See page 7.

"SHADELAND CLIMAX" OATS (Certified)

A medium early variety that produces high yields. In fact, if you were correct in a "guess" that an earlier ripening type would pay, this is the Oats to plant. Its grain is heavy—a beautiful white Oats. The hull is thin and the large tree type head often shows three grains to the spikelet. The straw is stiff—stands up to wind and weather. Hoffman's old friends will remember the time when this was a very popular Oats in this territory. It is good, plump seed, direct from the famous Shadeland Valleys, and thoroughly cleaned. Instant orders are urged.

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Oats for Grazing

In response to many queries regarding grazing of Oats, we asked agricultural authorities this question. According to them, this is economical only when Oats has been used as a nurse crop, planted about one bushel to the acre.

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To provide early green feed sow Canada Peas with Oats. See page 6.

More Grain—More Milk

The U. S. Department of Agricultural Economics and Dairy Husbandry has just completed an extensive study on how much grain a cow can be fed to increase her milk productivity without affecting her health. The many pages of the report can be summed up in this statement. If the price of milk is relatively high, and the grain is available at normal prices (or grown on your own farm and valued at normal prices), then the average cow can be profitably fed at 120% of the standard Haecker allowance. While the cow cannot be expected to produce 20% more milk, she will give enough extra milk to make the 20% extra grain feeding handsomely profitable. The same study also showed that the cow kept up her weight on this increased grain ration, and that she is sensible in not overeating. Unless you sell your milk for processing at less than average market prices in this area, it will pay you to check into this possibility thoroughly. We suggest that you get complete information by writing to the Agricultural Experiment Station, Pennsylvania State College, for the whole story.

To meet the increased possibilities for you this year, we are prepared with four different varieties of Oats, and, with the exception of Victory Certified, there should be sufficient seed to meet all needs. All this Hoffman seed is thoroughly cleaned. It comes from known vigorous sources, with very fine yield records. If you ask us for our first choice we recommend the tried and true Hoffman Victory Oats (Certified).

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Corn Borer Control

In areas where there is any infestation from the corn borer, every farmer should co-operate in cleaning up the corn fodder and corn stalks. Best to disc it down either in the fall or early spring. This fodder should then be plowed under so that there is not one part of it protruding from the soil. It is in the center of the stalk and cob that the corn borer lives during the winter. If completely covered with several inches of soil it is eliminated.

Corn left in the crib should be put through the hammer mill, or immediately after shelling in the spring the cobs should be burned.

A good crop of oats is a real satisfaction. Same as it must have been on this New York State farm where the two pictures on these pages were taken (by U. S. Soil Conservation men). Strip-farming is practiced on this farm with very good success. A practice certainly worthy of serious thought where soil erosion is any problem at all. (Note page 29.)





Did the Local Ration Board supply points for these 4-legged members of the "family"? This feeder knew the time was coming when his young stock had to have certain feed. He made sure. He grew it himself! Proper planning was done . . . in advance . . . and in time. And the necessary feed was there. And went into good use.

HOFFMAN CANADA PEAS

For early green feed. And rich hay when ordinary pasture is sparse. Makes splendid feed for cattle, sheep and hogs. Besides being palatable, protein content is very high. Makes a nutritious feed readily taken to. Plant very early in spring. Growth is rapid, giving you a green feed when others are just getting started. Many farmers prefer sowing Canada Peas with oats. The oats support the vines, make an even more palatable combination than peas alone. As a combination, use 1 1/4 bushels of each per acre. First drill peas 3 to 3 1/2 inches deep. Then drill oats 1 1/2 to 2 inches deep. Pasture when about one foot high. Feed gradually at first to avoid bloating. To avoid trampling by stock, many folks mow Canada Peas, feeding it green, or make it into hay. After cutting, a new growth will appear, for a later crop of feed or pasture.

As early green pasture for hogs, mix one bushel Canada Peas, 1 bushel Oats, 3 to 4 pounds Rape and 7 to 10 pounds Sweet Clover or Alfalfa per acre. This high protein pasturage is relished by hogs. Sow early in the spring, in hog runs. Growth is rapid, and is ready for forage when 9 to 10 inches high.

Do not confuse Canada Peas with Cow Peas, which do not have the same nutritional value and should not be planted with Oats.

Hoffman Seed Grains

GOOD CLEAN SEED—READY TO PRODUCE
RICH FEED FOR YOU

"WISCONSIN 38" (VELVET) BARLEY

For the folks who sow barley either as a grain or nurse crop, this is the most popular variety. It is a heavy grain yielder (grain is similar to corn in feeding value). Grows smooth beards—without the sharp barbs. This early maturing variety also produces straw of good length. As a nurse crop for Alfalfa or Canada Peas, it gives the young grass full support and the benefit of all possible moisture.

"WISCONSIN PEDIGREE" BARLEY

A well-liked, bearded, 6-row type. Tall, vigorous grower. Straw of good stiffness. Yields well year after year.

"SPARTON" (2-ROW) BARLEY

Good-yielding, bearded variety developed in Michigan. Well adapted also for Northern Pennsylvania. Medium maturity. Stands well.

SPRING WHEAT

"Marquis" type. Good for flour. Early, and not often subject to rust and disease. Smaller grain than winter wheat. Sown mostly in higher altitudes of Pennsylvania.

SPRING RYE

A grain-producing Rye not as tall or plump as Winter Rye. Sow early. Handle about like Oats. Good for spring pasture, soiling purposes. Supply very short.

SPELTZ

Speltz grows on poor land. Resists drought, smut, rust. Not readily damaged by rain. Adaptable to wide range of soil and climate. Fed to cows, horses, cattle, hogs. Often mixed with bran shorts. Ripens medium early.

"CERESAN" (Dust Treatment) for Oats, Barley, Wheat

Seed doesn't have to be smutty to need this new, improved "Ceresan." Extensive tests have proved that "Ceresan" treatment increases yield even where there is no sign of smut. In 65 tests with oats, over a three-year period, yield from "Ceresan" treated seed increased 18 bushels for every 100. Barley and wheat yields increased six bushels for every 100—a big return when you consider that "Ceresan" costs you only about 2 cents a bushel of grain seed treated.

With an effective treatment available at such a cost, it just doesn't pay to gamble with losses through stripe and seeding blight, covered or black loose smut, or seed rotting caused by soil fungus.

Use it on your oats, wheat and barley seed 24 hours BEFORE planting— $\frac{1}{2}$ ounce of dust per bushel of seed. Postpaid prices:

4 oz., \$0.35; 1 lb., \$0.80; 5 lbs., \$3.40.

EXTRA FEED FROM HOFFMAN BUCKWHEAT

If you have a field or section of your farm that has been loafing because it couldn't be depended on for any kind of crop, we recommend that you sow it to Buckwheat this June. Buckwheat flour is a very valuable human food—you'll have a market for your grain if you want to sell it. Buckwheat middlings have a very high protein content—particularly valuable now in this shortage. Buckwheat grain is an exceptionally good feed for poultry. Even the blossoms are valuable for bees—they help make rich, dark honey.

You don't even need to plow for buckwheat. Just run your disc over the land and seed—one bushel to the acre. Yield in grain and straw is heavy—even on thin soils. Buckwheat will do very well on fallow land. Seeding may be done

all of June and first half of July, so it makes a good standby for other fields in case a bad spring ruins earlier seedings.

While some folks use Buckwheat to choke out weeds and grass, it now has a bigger job in adding extra bushels of feed. It can be used, for instance, in Southeastern areas to follow an early maturing crop. Or in a worn-out hay field after cutting or spring grazing, develop a grain crop and still leave time to sow a late fall crop. State authorities are recommending it for every otherwise useless acre, and we are preparing for your needs with some choice plump seed of high germination and thoroughly cleaned. Look over your planting map and see if you can add several extra grain acres with Buckwheat.

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Fertilizer Recommendations for 1944

In 1938 a survey showed that for every dollar the farmer put into fertilizer for his land he got back \$3.60 more return. Since then farm crops have greatly risen in value—but fertilizer has advanced but little. At today's comparative prices, every dollar's worth of fertilizer brings back \$5 to \$6 in increased crop value.

This big return would be desirable any year. This year it's doubly important when those crops are so badly needed.

Restrictions on the use of nitrogen for 1944 are lower than last year. There should be reasonably adequate supplies of superphosphate but less potash than normal.

Fourteen grades have been authorized for Maryland, twelve grades for Pennsylvania. General recommendations follow for:

Pennsylvania

Corn on well-manured, fertile soils can do very well with 18 or 20 per cent superphosphate. Otherwise, one can use a 3-12-6, 4-12-4 or 2-12-6.

Oats and soy beans following manured corn or potatoes also can do well enough on good land with superphosphate. Otherwise, some potash may help as in 0-14-7, especially where the oats is to be seeded with a legume. An 0-12-12 also is authorized but should be used only where one feels that maximum potash is essential, as perhaps on alfalfa. Complete fertilizers, such as 3-12-6, 2-12-6, or 4-12-4, also may be used on oats.

Superphosphate should be the standby for pasture improvement, although, without manure, on poor soils the 0-14-7 sometimes may bring in clover more rapidly. The high-nitrogen top-dressers should be used on pasture only on a limited acreage of good sod, perhaps an acre for every 3 or 4 cows, with the idea primarily of making earlier grazing and more of it during May and early June. Where a heavier crop of timothy hay is desired, 200 to 300 pounds of one of the nitrogenous top-dressers per acre should give results.

New York . . . New Jersey . . . Maryland Delaware . . . West Virginia . . . Ohio

Space here prevents listing details for all states. Readers located in other states . . . won't you please consult your Experiment Station, or County Agent, where full details will cheerfully be supplied.

In all states . . . It would be well to consult your County Agent for specific recommendations if you have any unusual soil conditions.

Alfalfa...Continued Shortage of Good Seed Urges Early Ordering

Government reports show this year's crop of Alfalfa seed to average not far below normal . . . but that is not the whole story. A heavy percentage of this seed crop was made in the Southwest. Seed from that source is not desirable for planting here in the Northeast territory. Naturally, such seed from the Southern areas will sell at lower prices. Be cautious, for your own sake. All the Alfalfa seed of the most desirable quality that exists today will be in urgent demand. None of it will have to go at low prices.

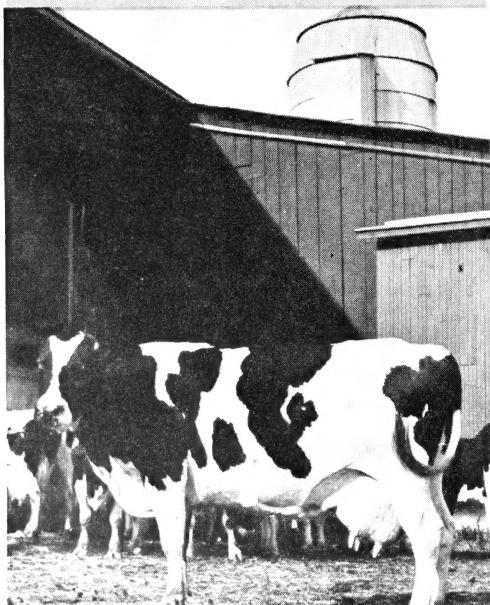
For the first time, effective September 29, 1943, there came into being certain "ceiling prices," beyond which seed dare not sell.

For Alfalfa the Government has set a scale of prices based on origin of the seed. Seed from farthest north commands the highest price . . . seed from the south the lowest. The safest plan to avoid confusion is to entrust your seeding to the offerings made on these pages. You will be assured of seed from reliable sources . . . seed that has proven dependable . . . seed that has been

making excellent crops for thousands of successful Alfalfa growers . . . seed that has been thoroughly cleaned . . . seed that is free of foul weeds . . . seed that will do for you what it has been doing for great numbers of Eastern and Northern farmers —namely, produce profitable crops.

More than 25 years ago, when Hoffman originated the name "Northwest" Alfalfa seed, we intended it to designate a certain area in Northwestern states where particularly vigorous, hardy strains were being propagated. At all times we have not only been particular about the states of origin, but the areas within those states. In late years, the name Northwest has been borrowed by many other sellers of seed and applied to Alfalfa from sources we don't consider hardy enough for our conditions here in the East. The word "Northwest" has been used by these folks to designate seed from an area roughly one-third of the U. S.—so much so that it can be actually misleading. So we have decided to abandon this name "Northwest" in favor of a closer designation of origin. The designations below, therefore, cover seeds from the same origins which have produced such outstanding records for Hoffman customers. They are all backed by authentic records of the U. S. Verification Seed Service.

"Amy," champion butter fat producer (1000 lbs.) of Lewis A. Zimmerman's Holsteins, Carbon County, Pa. Front cover page shows Mrs. Zimmerman and her daughter Jane finishing the milking of their fine herd.



TWO HOFFMAN ALFALFAS

1. From Utah or Utah-Colorado
(U. S. Verified Origin)
2. Montana-Wyoming-Nebraska Combination
(U. S. Verified Origin)

Seed contained in both these offerings is from the same sources which made Hoffman's "Northwest" brand Alfalfa a dependable favorite for over a quarter of a century. There is no secret about its ability to produce. It comes from Rocky Mountains or similar territory, where the parents that produce the seed have to show ability to come through exceptionally tough winters, short seasons, dry periods and other adverse conditions. When the seed gets to our climates, it flourishes. Stands of 5, 7, even 9 years—extremely heavy producing stands—have been reported. Hoffman seed has resulted in these stands because it produces extra large and vigorous root systems. That's why it can be cut frequently for extra heavy loads or grazed and still withstand dry spells and cold winters. If you want the kind of specially cleaned seed that made the name Hoffman "Northwest" famous, order either of the above combinations. And order early, for the supply is extremely short.

Where alfalfa really means business!
In northeastern Pennsylvania, many very large acreages today produce alfalfa for alfalfa meal. Here is a scene at the original alfalfa-dehydrating plant, Greenacres Farms, Nazareth, Pa. Ton after ton of rich feed is provided.



HOFFMAN "GRIMM" ALFALFA

"Grimm" is a leader among the hardy alfalfas that produce better crops and withstand wide weather extremes, especially in the North and at high altitudes. It "pulls through" winters that would kill many other types. Crowns are set low and roots often branch out to afford much protection to the plants. . . . When in stock will be on price list.

STATE CERTIFIED "GRIMM." Every bag is under supervision of its State Department from the field to you. It is sealed at the thresher, checked and resealed at every cleaning operation. Supply is very limited.

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Alfalfa, Corn-and-Cob Meal—Fine Silage

Good quality legume silage remains possible, in spite of wartime shortages of such preservatives as molasses and phosphoric acid. Some very good silage was made last year by adding 200 pounds of corn-and-cob meal to each ton of alfalfa as it was stored.

Another means of obtaining good silage was by wilting the alfalfa in the swath to a moisture content of around 60 per cent. This process apparently concentrated the fermentable sugars in the cells of the plants sufficiently to result in a silage which was palatable to the cows and which kept well.

Growing sorghums with legume crops and separately to be mixed with them when ensiled was also successful. Feeding tests indicate that 15 to 25 per cent of green sorghum forage mixed with alfalfa or soy beans makes good silage.

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Alfalfa Needs Lime

Unless the soil is fairly sweet, it is practically useless to attempt to grow alfalfa. If there is any doubt in the matter, samples of soil, not over 4 inches deep, should be taken from several parts of the field, mixed together and a composite sent to your County Agent for a test. He will report whether lime is needed and the approximate amount per acre. If it is impractical to apply enough lime to sweeten the soil thoroughly, it is safer to rely upon red or alsike clover, which can succeed on fairly fertile soils with a much smaller amount of lime if it is applied on the surface where the clover seed is to be sown.

HOFFMAN KANSAS ALFALFA

(U. S. Verified Origin)

Customers have been getting extra good results from this seed, especially in Southeastern Pennsylvania and southward, at low altitudes. Probably because Kansas plants have to be able to withstand conditions that kill weaklings before they get to the seed-producing stage. This seed is genuine Kansas, Government tagged. Dependable. Thoroughly cleaned. We submit it on the basis of the good results reported.

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Alfalfa Needs Inoculation

Neglect of proper inoculation is a frequent cause of alfalfa failure. Unless alfalfa or sweet clover, which uses the same bacteria, has been successfully grown on the field before, the proper bacteria often will not be in the soil. Without these bacteria to produce nodules on the roots and supply the crop with free atmospheric nitrogen, the alfalfa must depend entirely on the nitrogen in the soil. The nitrogen-gathering bacteria give any legume its value. Without them it will be pale and unthrifty, will not produce large yields or a high-protein forage (protein is another name for nitrogen), will soon be choked out by weeds, and will leave the soil poorer.

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Grass That Saves Grain

Combination alfalfa and brome grass is the best dairy pasture on the Upjohn farm in Kalamazoo County, Michigan. Twenty-five acres carry 25 producing cows from May 15 to October 1. The pasture is so nutritious that many cows eat but half the grain which their production justifies.

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Conserving Protein Is Not Enough

More protein must be produced according to U.S.D.A.—more high quality hay, better use of pasture, more home-grown grain. Your grain field is highly important. With 600 lbs. of 30% supplement and 1,400 lbs. of your own grain, you can make a ton of feed with 16% protein content. In the present situation, this mixture with good hay (with one-third or more legumes) will do the feed job. If your hay is poor you'll need an 18% protein allowance—which you can get by adding 1,200 lbs. of your own grain to 800 lbs. of protein supplement.



Even Good Pasture Is Not Enough for Cows

High-producing cows cannot eat enough grass per day to maintain flesh and a high production. It is true that grass stimulates extra production in many cows, but some cows will lose flesh and drop in production later if they are not fed additional feed.

FIRST, DRY HAY—Feeding a small amount of dry hay throughout the pasture season is a practice adopted by many dairymen with excellent results. Pasture grass is a rather laxative feed. The dry hay slows up the grass through the digestive tract and more nutrients are assimilated by the cow. The feeding of 4 to 5 pounds of dry hay per day also helps cows to hold up in production better during the fall months. Yearling heifers and dry cows also will do much better if they receive some dry hay each day.

SECOND, GRAIN—Heavy producing cows will need some grain. This need not be in large amounts nor of a high protein content. A 12 to 16 per cent protein mixture usually is sufficient. Feed Guernseys and Jerseys one pound of grain for each 4 or 5 pounds of milk if producing more than 20 pounds per day. Other breeds should receive one pound of grain for each 5 or 6 pounds of milk if they are giving more than 25 pounds of milk per day. The amount of grain fed will depend upon quality and amount of pasture available and the individual cow.

THIRD, DRY WEATHER—If pasture becomes short during July and August, it will be necessary to feed supplemental feeds, such as silage, green soy beans, green corn, more hay, or heavier grain.

FOURTH, CLIPPING—Clipping pastures makes for better feed. The shorter, newer grass is more palatable and more nutritious. Keep the young grass growing similar to a lawn. Most pastures should be clipped two or three times during the season.

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When Bare Spots Show in the Alfalfa Field

Cover them with the following mixture figured on a per acre basis: 6 pounds of timothy, 4 pounds of red clover and 2 pounds of alsike, on the thin spots. In some cases this can be increased to a little heavier seeding on an acre basis. This is particularly true if the total amount of thin spots in entire field is not much in actual acreage.

Manure these thin spots, apply fertilizer on the basis of 300 to 350 pounds of 3-12-6 or 4-12-4. It would probably not be advantageous to lime. Undoubtedly lime was applied at the time of seeding.

Tough as the going might be at present, discouraging as production might be under today's reduced rations, the man who sticks to his herd building program will find himself with a highly profitable investment when the situation is eased.

Looking ahead, there are opening up new markets for milk. One future source of dairy revenue will be selling to a cheese industry which is already establishing itself in many states of the East and will grow rapidly after the war.

The cheese industry is only one of these future possibilities. Dehydrated milk is another which war shipping needs pushed into the spotlight. Frozen and evaporated milk have qualities which will recommend development under enlightened storage and transportation conditions. All of these new outlets will combine to relieve the old too much production—too little demand situation. Modern thinking is tending to level off the feast and famine peaks and valleys of the past.

Make Hay at the Right Time

Tests showed that 1,628 lbs. of alfalfa cut in the bud stage produced as many pounds gain on cattle as 3,910 lbs. of alfalfa cut when dead ripe. You'll get best results from alfalfa if you cut when the buds nearest the base of the plant have just started. Maybe you won't get as much hay, but in modern feeding the quality is more important than quantity. Cutting at this time will give you more actual FEED. Just one thing to be careful of. Let one crop reach full bloom stage before cutting to prolong the life of your stand.

Timothy should be cut right in the full bloom stage. At this time, it can yield 20 per cent more DIGESTIBLE dry matter and 50 per cent more protein per acre than Timothy cut when the seed is ripe. Cutting in the early bloom stage gives less feeding value per acre than cutting right at full bloom.

Red Clover will give the highest yield of protein and the highest feed value per acre if cut when one-third to full bloom. Mammoth should also be cut at this stage, but Alsike is at its best feed value when cut later, as the brown seed heads begin to appear.

This year above all others, the feeding value of your hay is the thing that counts most. Add pounds of milk or meat for every trip of your mower around the field by cutting at the right time.

What about your orchard? Has there been something overlooked . . . possibly a crop for between the rows? This New Jersey farm puts alfalfa to very good use (Photo courtesy Soil Conservation Service). Your local County Agent has on file the latest information on orchard practices . . . it would pay very well to consult him about any such problems.



Improve Your Soil and Crop Too -With Hoffman Inoculant



More hay is assured the user of Hoffman Inoculant . . . whether it's alfalfa, clover or soy beans. Even though inoculation had been previously practiced, it pays to INOCULATE the seed for **EVERY NEW SEEDING**.

Pasture Improvement

Where no manure is used, the average recommendation in Pennsylvania and other states is 400 to 500 pounds of superphosphate. New York State recommends as high as 800 pounds.

It would be better to use as much as 400 pounds of 0-14-6 or 0-14-14. Potash brings on white clover quicker.

★ ★ ★

Proper Application of Lime on a Seed Bed

It is best to lime when the soil is dry. Experiments have shown that lime on one-half of one field, that was worked in thoroughly before a rain, was much more effective than in the balance of the field after a rain. It seems that lime does not work down into the soil as soon as was once thought it would. It takes a lot less lime to neutralize the soil properly when the lime is worked down thoroughly than if the lime is left too near the top. It takes lime applied on top several years to work down to plow depth.

On farms where every possible acre is already in production, here's a proved means of helping those acres do a better job. In this way . . . Treat all the legume seeds you sow with Hoffman Inoculant and

GROW YOUR OWN NITROGEN

Help every legume crop you put out do a better job for you. The Clovers, Alfalfas, Soy Beans, Vetch, Peas—all have the ability to gather some nitrogen from the air while growing. And deposit it at their roots. But here's a way to get more of that precious nitrogen . . . at almost no cost! It certainly does tell on the growing crop. Many Hoffman customers who made tests have said they can tell the difference, to the row, where the inoculated seed was sown. It was so much better. One careful Wisconsin test showed actual by-weight crop increases (over un-inoculated seed) of 33 per cent more Soy Beans—40 per cent more Clover—67 per cent more Alfalfa! You just can't get such returns anywhere else on the farm—\$20 to \$40 gain in crop value, by investing maybe 10 to 20 cents an acre!

AMAZING RETURN FOR LOW COST

Fifteen cents' worth of the Alfalfa Inoculant has returned 1,680 more pounds of Hay in one cutting. Nine cents' worth of Red Clover Inoculant has produced 460 more pounds of Hay to the acre. Hoffman Inoculant is GUARANTEED to be a pure, live, fresh culture—and to produce the nitrogen-catching nodules. Its quality and efficiency have always shown up well when checked by authoritative laboratories.

Oats following inoculated Red Clover has done twice as well as Oats following Timothy, because of that nitrogen-catching inoculant.

Certain legumes (Soy Beans especially) may often actually take out more from the soil than they can put back. But if Hoffman Inoculant is correctly applied to the seed this changes . . . and a real soil-improving job is accomplished.

BE SURE TO GET THE RIGHT INOCULANT. What's good for Red Clover won't do for Soy Beans. You have to have the right inoculant to get results. Hoffman has one special inoculant for Red Clover, Mammoth, Alsike, White Clover. . . . Another for Alfalfa and Sweet Clover. . . . Another for Soy Beans. . . . Another for Vetch and Canada Peas. One for Cow Peas and for Lespedeza.

ORDER Hoffman Inoculant for **EVERY** new seeding of the legumes. Yes—even if you inoculated for that field before. **IT PAYS!**

Hoffman Clovers...Scarce-But Still the Same High Quality

RED CLOVER

The situation is serious in Red Clover Seed. Last year's very heavy seedings, plus the large quantities of Red Clover Seed sent out of the United States on lend-lease, used up the reserves. Coupled with it comes along one of the shortest crops in a long time. Many areas that used to send out large quantities of Red Clover Seed, this year have to bring in seed from other sections.

Yet, is there any more satisfaction than to have a good thick, clean stand of Clover in your field? Back of such stands is usually the story of good seed sown. Hoffman's Clover Seed has helped make thousands of such stands. It has proved dependable through these many years.

Hoffman's Clover Seed answers these important questions: Is it seed from desirable sources? Has it been cleaned right? Is it tested? Will it grow? Is it suited for your planting? So many people just buy seed and don't consider these vital features. A year like this when there is so much at stake, the safest policy is to buy and sow the very best quality seed your money can purchase.

Important to the success of your Clover stand is the condition of the soil. If there is any shortage of lime, by all means supply it now. Another good point is to inoculate your Clover Seed . . . it certainly makes a difference. Depend on Hoffman's Seed! Inoculate it! Buy it now! You will be starting right for a good crop.

ALSIKE CLOVER

Here again is a very short seed crop. The crop has been disappointing in practically all areas that usually produce Alsike Seed. It is most important to order now . . . not delay for a single day.

Hoffman's Alsike is a standard of high quality. Cleaned to very high purity, free from noxious weeds, tested and of sound growth.

You are acquainted with the fact that Alsike grows like Red Clover . . . not as tall, finer stems, blossom is nearly white, it makes finer hay, goes farther in sowing. Alsike is a sure catch—not subject to Clover "sickness"—has more of a root system—stands great ranges of temperature—is less liable to winter-kill—a very hardy plant. Most folks mix Alsike with their Red Clover seed . . . about three parts of Red to one part of Alsike.

Note: It may be that during the season we will be able to offer some Alsike or Red Clover which may contain other crop impurities—such as White Dutch Clover, Timothy, Sweet or other crop seed. Price list will quote these lots if available.

MAMMOTH (SAPLING) CLOVER

Sometimes called Sapling or English Clover. Here is a Clover that should have your very close attention this year. The seed crop was not large, but comparatively there is more Mammoth Clover than Red. Mammoth grows taller. Makes a somewhat coarser plant. On poor, sandy or acid soil, it thrives better than does Red Clover on the average. Ripe ten days to two weeks later than Red but produces plenty of hay on its one crop. It is interesting to look over the 1941 crop results obtained from Mammoth Clover shown by research tests made by the Pennsylvania State Experiment Station. The first cutting yields were 4,637 and 4,429 pounds as compared to the highest yields of Red Clover of 3,894 and 3,686 . . . the second cuttings produced 1,589 and 1,528 versus 2,165 pounds each of the best Red Clovers.

The first cutting the following season, the same Mammoth plantings produced 2,507 and 1,601 pounds versus 1,984 and 1,745 from the two best Red Clovers. This is a good type for folks who will, in this year's extreme emergency, decide to sow some Mammoth Clover instead of Red . . . or at least to mix Mammoth Clover with their Red to make this short crop of Red Clover go farther.

Hoffman's Mammoth Clover seed is of strictly fine quality—as good as the crop has produced—tested—high germination—free from foul weeds—priced right. Plants of Mammoth Clover live for three years on the average against Red Clover's usual two. This adds to its economy. Branching top root systems dig deep and make Mammoth a splendid soil improver. Since it blooms with Timothy, many combine the two for hay.

HOFFMAN SWEET CLOVERS

For use on poorer soils where you want a crop and, at the same time, improve the soil. Be sure to inoculate, and be sure of the source of your seed. Regardless of the tag on Hoffman Seed, it has been thoroughly cleaned and is free of noxious weeds.

TALL-GROWING TYPE

This fine soil builder lasts two years. Planted in the spring, it makes good growth by fall. Will reseed itself if left standing. Makes coarse hay.

YELLOW BLOSSOM TYPE

Like the white blossom, it is biennial. Grows smaller tops—2 to 3 feet the first year, 4 to 5 the second. Stems finer—preferred for hay or pasture.



REAL CLOVER HAY is the hope that follows each new seeding. Real hay has been the result on thousands of farms of the East and North, where owners depended on Hoffman Seed.

TWO MIXTURES

In spite of the shortage of good seed, we will continue to offer these two famous Hoffman mixtures as long as seed is available. Price is somewhat lower. Quality is good. Clean of noxious weeds.

ECONOMICAL MIXTURE

(About $\frac{1}{2}$ Red Clover, $\frac{1}{4}$ Alsike and $\frac{1}{4}$ Timothy.) Made up mostly from lots of mixed clovers and timothy produced in this mixed condition—hence the lower cost. Proportions vary slightly, sometimes even a little alfalfa or other clovers are present, but all of the mixture will be productive of good hay and pasture. We've sold this mixture for years and folks certainly like it.

ALSIKE AND TIMOTHY MIXED

The Alsike content in this mixture usually runs 20 per cent or better. It makes an ideal mixture because both seeds will thrive on poorer ground and both ripen together. This is particularly important for hay, for it has been proved that the protein content is higher when cut at the right blooming stage—see page 10. A and T has been producing fine stands of hay for many years—chiefly because we have never deviated from the high quality of the seeds in the mixture. This is no year to try to save money on seed for feeding crops, so even though the price of this mixture is lower, we offer you A and T Mixture solely on its ability to produce good crops of high protein hay. Don't try to compare it with seed which sells cheap because its germination is doubtful, or because it hasn't been thoroughly cleaned.

HOFFMAN LADINO CLOVER

The story on Ladino is no different this year from all other clovers—supply is extremely short. This is very unfortunate, considering the many friends it has made the past few years by its ability to produce rich stands of needed hay or for quick recovery pasture. Its usual use is for enriching a mixture of other grasses, and you will find recommendations covering such mixtures on page 26.

Ladino is a mammoth perennial type of White Clover. Its roots are shallow but vigorous and send up large leaves on sturdy stems. It has become the backbone of the pasture on many dairy farms because it yields more heavily and recovers more quickly than the smaller clovers. It has one other splendid characteristic—its runner type root crowds out weeds.

The many enthusiastic letters we have received speak well for the quality of Hoffman Ladino Seed. Practically every writer mentions his amazement at the vigor of Ladino in pasture recovery. Many folks have noted that cattle show a liking for it.

The seed we have is of good quality, thoroughly cleaned, high germination. But . . . we just don't have half enough. So if you want Ladino seed—sit down right now and fill out your order.

"MIDLAND" AND "CUMBERLAND"

The two new Red Clovers. Both bred for high resistance to "stem-spot" disease. Midland for higher altitudes. Cumberland for lower locations. Supply almost unobtainable. If in stock, will be quoted on price list.

Soy Beans...High Protein Feed

Soy beans today are one of the most important and the most versatile crops on the farm. Their uses are so numerous that a listing would require these two pages, and these uses have been multiplied as a result of the war. The meal and oil from the beans is playing its part in the war effort in all kinds of items from plastics to camouflage paints. Health authorities in many states are behind a movement to sell beans in sprouted form for human consumption during the meat shortage. In the farm feeding program, Soy Beans are equally versatile. The beans themselves have the highest protein content of all feeds, 36 per cent compared to barley at 10 to 12 per cent. And while there are certain arguments against straight feeding of cracked beans, the meal makes an excellent base for many a helpful mash. But Soy Beans may also be fed as pasture or hay with equally good results. And they may be combined in the field with other crops such as oats, sudan grass, millets and sorghum to offer a wide variety of nutritious feeds.

And beans will grow anywhere—even on poor land. In fact, properly inoculated beans on poor land will build a high nitrogen content into the soil for following crops.

On these two pages you will find recommendations based on questions we have asked agricultural authorities for the best uses of beans. On one fact, however, they all agree—don't plant your beans too early. For every three days you move up your planting date you gain only one day at the harvest end, and you run increasing risk of having a poor stand because cold—wet weather—long weeds choke off the beans at the start.

One more point. Decide the purpose for which you intend to use your Soy Beans and then select the variety best fitted from the descriptions given. Naturally, in such an important crop, you want the best seed you can get. We have been fortunate in getting good seed from reliable sources, and they are well cleaned, free of foreign matter. We haven't a plentiful supply, so even though you don't plant till later, don't delay your order. Include your requirements with the early planting seeds—it may be the item which makes your order freight free (see page 31).

SOY BEAN MEAL . . . A new industry—a new product—to help bridge the present emergency. Soy Beans—besides their immense aid in the production of emergency hay and soil improvement, today occupy another vital spot—producing much-needed oil for industry as well as feeding. Not to mention the big place they have taken over in the plastics industry of our country.

"WILSON BLACK" SOY BEANS

While this variety is early enough to mature beans in lower Pennsylvania, Ohio, New Jersey and southward, and while it will produce 20 to 30 bushels of beans in these areas, its chief value is as a hay type bean. It produces a great growth of slender stems 5 feet tall on good ground, 3 to 4 feet even on poor ground, yielding 2 to 4 tons of high protein hay per acre in hay or ensilage. Its rich growth also makes it an excellent pasture bean. If you plant soy beans in your corn, this tall erect variety is the one to plant. Incidentally, the nitrogen produced by inoculated seed helps the corn, and the resulting ensilage is rich in food value.

This black beanned variety matures beans in about 115 days.

"KINGWA" (BLACK) SOY BEANS

A fine helper this year, when a lot of emergency hay will be required. Recent tests at Pennsylvania State College show Kingwa an excellent hay bean. Come along in good time. Leafy and finer-stemmed than many types of Soy Beans. Not as hard to cure. Produce very good weight of dry hay.

Folks wanting Soy Beans to help them overcome their short supply of hay can safely rely on either of these Hoffman black-bean types—the Kingwa or Wilson Black. Consult price list for quotations. Always keep in mind the Hoffman bag-free and freight-paid offers.



SOY BEAN HAY . . . Don't overlook its great usefulness this year. Has been popular right along. Nutritious. Easy to grow. Provides good volume, too. Be sure to plant a hay-type bean . . . the black varieties are much preferred for better yields of more leafy plants. Yellow type average more beans—less hay.



"MANCHU" SOY BEANS

This is the so-called yellow bean—best for meal and oil production. It produces great quantities of medium-sized beans which mature in about 110 days. The beans stay in the pods till threshing much better than most varieties—a valuable characteristic in case of a warm, dry fall. While Manchu's chief value is for bean production—it often reaches 28 to 35 bushels per acre—its erect and bushy plant can be used to good advantage for forage and for hogging down. Be sure to inoculate your seed.

★ ★ ★

For Quick Hay . . . Soy Beans

Where clover, alfalfa or other legume hay is short, soy beans provide an excellent substitute. Soy bean hay contains 14 to 16 per cent crude protein, compared to about 15 per cent in alfalfa, and about 13 per cent in clover hay. Feeding experiments have shown soy bean hay equal to alfalfa for dairy cattle. Sheep relish it and thrive on it. From average soils 1½ to 2½ tons of good hay per acre may be expected—depending on the season and fertility level.

★ ★ ★

Sudan and soy beans best for green feed. If you wait until growth of soys is big enough for hay, then the Sudan is too far gone and too tough. Use these combinations for green feed for best results.

★ ★ ★

Well-Managed Pasture

One of the most important things on pasture management is to get cows to get in there early and to keep that grass down to less than 4 inches on a general average. Just as soon as the grass gets too high too quick and too early in the spring, the cows can't handle it and it starts getting tall and pokes them in the eyes and they start wandering around taking a bite here and there. While it is low and thick they go slowly and progressively move their heads from side to side and take it all as it comes.

Applying manure in the middle of the winter when the ground is frozen is a very good way to get this pasture to perk up quickly in the spring.

How Would You Like to Farm in Britain?

The American farmer faces some tough going this year, but the British farmer has it even tougher. He has to: Carry on all normal after-nightfall farm operations without a light visible in his barnyard or showing from his house or other farm buildings; get used to having in his turnip field an anti-aircraft battery which periodically flames into action against enemy night raiders; work his fields up to the very edge of bomb craters—perhaps as many as 50 of them scattered about in his most productive land; sell increased products—grown under handicaps of labor and equipment shortages—at fixed prices; feed livestock and poultry on a coupon ration basis; pay a heavy income tax, and, if his profits are above a fixed level, give up 100 per cent of that surplus profit.

Despite all these handicaps, United Kingdom farmers have increased their crops 50 per cent over the pre-war average. Britain has jumped 70 per cent above the already high production levels.

★ ★ ★

EDIBLE SOY BEANS

The protein value of soy beans has been very much emphasized during the meat shortage. The fact is, however, that the edible varieties of soy beans are delicious as well as nutritious, and many people like ourselves eat them just because we like them. Thinking that the families of our friends might like this treat also, we have grown some seed of the Bansei Soy Bean. The Bansei Bean can be eaten green in the pod like a string bean, green shelled like a lima bean, or in the familiar dried bean form.

BANSEI SOY BEANS are one of the earliest and most productive of all edible soy beans, and will produce crops in nearly every section of the East. Plants grown about 24 inches high are literally loaded with pods, which they support without need for stakes or brush. Beans are bright green when young, maturing to a yellow. Plant beans 1 or 2 inches apart in rows 28 inches apart. One-half pound of seed will plant many feet of row, enough to provide many delicious meals at every stage of growth. Give your family this new treat—add Bansei Edible Soy Beans to your seed order this spring.



Why FUNK G HYBRIDS Please So Many . . . So Much

Here are two pages giving reasons why this fine Funk G Hybrid Seed is pleasing so many thousands of corn farmers—so very much!

First . . . the seed is BRED RIGHT. Built into every Funk G Hybrid are extra good qualities. By foremost corn breeders—an outstanding staff, with headquarters and breeding nurseries at Bloomington, Illinois. Linked with leading practical corn farmers in all sections where corn is raised. A vast storehouse of corn knowledge is gathered each year. New blood-lines are constantly sought for, and as good new ones are located—the real scientific work begins. Years of inbreeding follow . . . to eliminate whatever undesirable traits might be present. Then follow years of cross-breeding to establish proper mating qualities. And finally another good Funk G Hybrid results. Painstaking, most careful, thorough watch is kept all along the line, through each generation. Then after once it is made, the new G Hybrid must be given its years of trial to see exactly what performance will result. All of this (and much more technical care and watching) precedes every Funk G Hybrid. Then comes the second important reason why these fine Funk G Hybrids are pleasing so many Eastern corn men so very much . . . it is the vast

HOFFMAN PROVING PROGRAM TO PROTECT EACH PURCHASER

Here at Hoffman's every Funk G Hybrid is proved before being sold to a customer. No other effort approaches its vastness. Or its exactness. Trained men—through these past eight years—have spent months of time and thousands of dollars learning the complete FACTS. You gain the benefit of all this, along with every purchase of G Hybrid seed. All guesswork has been eliminated. You are as-

sured good suitable seed, to meet with and flourish under YOUR conditions of soil and season. You know before you plant your Funk G Hybrid that it has been proven suitable for you. This is protection way past any offered elsewhere in the whole hybrid corn industry. It is this protection that has put Funk G Hybrids into their rightful place in these states of the East and North . . . They will continue to be bred right by the outstanding Funk organization. And properly proved for you, by Hoffman, before you are asked to buy them.

You can safely bank on Funk G Hybrid seed from Hoffman as fitted to do your corn job. . . . This year put it to work for you. Your Government wants you and all other corn farmers to increase your corn production. And where no more acres are available for corn, here's the safe, sure way to grow more corn on the acreage you do have! It works! Here is a safe, sound, sure means to do it. Start now. . . . Read the further facts on next page and do as there stated . . . order your Funk G Hybrid seed at once!

* * *

Control Brown Rot and Scab on Fruit

To prevent brown rot and scab infection on fruit, twigs, and leaves, start spraying immediately and, if possible, complete coverage within a week.

Use one of the following sulphur fungicides: A wet-table sulphur according to manufacturer's directions, or self-boiled lime sulphur 16-16-100 (16 pounds burned lime, 16 pounds sulphur about 100-150 mesh, in 100 gallons of water). Where brown rot is severe, self-boiled lime sulphur usually gives better control.

Thoroughly cover the fruit, leaves, and smaller twigs with a fine mist spray. Avoid using too much pressure against the foliage. To avoid burning, spray only when the temperature is below 85° Fahrenheit in the shade.



Here is shown one of the many Hoffman PROVING plots—conducted every year in each corn zone of the East. To insure one main thing—that you get the RIGHT Funk G Hybrid for your circumstances. Whether it is for husking, for silage, or for both.

Here's **EVERYTHING** You Want in Your Corn

QUICK START—Funk G Hybrid vigor gives your new seedlings a "jump start." Insurance against cold, wet springs and later dry spells.

STALKS THAT DO STAND UP—Strong whippy stalks, with real breeding back of them, to provide heavy root anchors, and insure you standing-up corn, in spite of heavy storms that would flatten many other corns.

BIG STRONG ROOTS—Amazing, tough roots. Fasten your corn securely. Roots that search deep and wide for all available moisture and plant food. Help grow more corn.

WIDE LEAVES—And more leaves. The extra leafiness of Funk G Hybrids means more food for the ears. And more nutritious bulk for the silage. More feed for your stock!

RESISTANCE TO PESTS—Help your corn crop win its battle. Plant Funk G Hybrid seed. Here are strains bred for great resistance to many widespread diseases, blights and insects.

ALWAYS GOOD EARS—Go down row after row, and it's hard to find Funk G stalks without a good ear! Very few barren stalks—almost no nubbins at all.

EASY TO HUSK—Everybody talks about this fine feature—they like it! Short stalks. Break off easily. Yet stay put until harvest. Funk G Hybrids husk fine—by hand or machine.

STAY GREEN TO MATURITY—The longer the leaves stay green—the more grain the plant continues to manufacture for you. Funk G Hybrid leaves stay green long—extend their production without extending their growing season.

MORE CORN PER EAR, BIGGER YIELD PER ACRE—Deep grains, thin cobs. Very high shelling percentage. It's the yield that counts—every year . . . and this year especially. . . . Pages 16 and 17 show you the way folks continue to report on their great success with Funk G seed. . . . Increased

yields of 15 to 20 per cent! . . . Sometimes 30 per cent and more! That counts!

WONDERFUL SILAGE—Great tonnage of juicy stalks, tender leaves, and rich grain . . . in proper proportions. Full of nutrition. Many biggest dairies of the East have found a new profit in Funk G Seed. They get ensilage in quantity and quality that helps keep down feed bills and keep up their milk production.

★ ★ *

ROUND OR FLAT KERNEL

Which Is Best?

There is no difference! Both produce equal crops! Each grain on any ear of corn has exactly the same germ-plasm inside—regardless of its size or shape. As nature is forming the grains on the cob—some of them get pushed aside here and there to be formed irregularly. Yet all have the same producing value. Rounds cost less—and are planted at a saving.

NEW SEED EVERY YEAR

Yes, plant **NEW** Funk G Hybrid seed every year. IT PAYS! Folks who once doubted found they were short 15 to 20 bushels of corn from each acre where they planted seed from their own hybrid crop of the year before. . . . Here is excellent seed—for a top crop! And costing very little cash for the big return benefits! Plant nothing else this all-important year!



ORDER NOW!

The day you get this catalog won't be too soon. Refer to the Funk G Hybrid book (shown left). If mislaid and you wish another sent you, just ask. . . . The demand for these great Funk G Hybrids—the early, medium and later numbers—is extremely heavy. Supply not big. Instant orders are strongly urged!



Hoffman Open-Pollinated Corn

If you want regular old-type corn, Hoffman offers you special advantages that will help you get utmost yield from these fine old varieties. For 36 years we've been supplying our friends with the right kind of seed. That means careful selection of seed fields, ear culling, perfect conditioning and proper grading. The man who plants his own corn never gets these advantages. Yet how important they are to a full row of vigorous seedlings in the spring and a full harvest in the fall!

"LANCASTER COUNTY SURE CROP"

Since Hoffman introduced this variety to Eastern farmers in 1912, more "Sure Crop" has been grown than all other varieties combined. It isn't a show corn, but if you like a large proportion of ears with well-glazed grain in your silo along with stalks, this corn will do it.

Ears are long and big, with yellow grains rich in protein. Cobs are thin and run 12 to 16 rows. Grains are somewhat square and don't leave gaps between rows. About a bushel of corn to 66 to 68 pounds of ears. Stalks are tall and leafy. Develops and matures early, and comes through droughts in fine shape. Soil? You don't have to worry. It doesn't demand rich soil. "Lancaster Sure Crop" has produced crops where other corns failed. Dependable even well into the North.

"LONG'S CHAMPION YELLOW"

A little too late for Northern sections, but has turned in fine crops in Southeastern Pennsylvania counties. It produces a big, smooth ear with deep yellow grains—plenty of them. In Northern Pennsylvania and New England States it has been a favorite for silage, producing heavy tonnage—topped only by the G Hybrids for silage developed

for these sections. Don't plant it on poor soil. Feed it well. On good soil it will perform well.

"WHITE CAP YELLOW DENT"

A medium early corn that matures in Southern Pennsylvania, New Jersey and Ohio (except in higher altitudes). It is a big yielder. Ears are white, but sides of the grain show a healthy yellow. Ears are compact, cob not too large, rows set close and grains are long and wide.

"IMPROVED LEAMING"

Called "rough and ready" because it is reliable for almost any soil. Good on poorer soils—fine on well-drained, fertile land. Grain is rich yellow, of good depth. Ear is well filled at both ends and between rows. Red cob, medium size, 14 to 18 rows to the ear. Good for fodder, numerous wide leaves and thick stalks, though not extra tall.

"GOLDEN QUEEN"

Rich yellow corn, high in feed value, good-sized ears with medium-sized grain. A good show corn that matures in mid-season. Popular in Southeastern Pennsylvania. Tall, well-leaved fodder, but won't mature in Northern counties.

"EARLY YELLOW LEAMING"

One of the earlier yellow dent corns, well adapted for higher locations. Small ears, small cobs with grains of good size, coming low on the stalk.

"EUREKA ENSILAGE"

Produces heavy leafy silage—sometimes up to 16 ft. tall. A favorite with dairy farmers. Too late for grain in the North.

"8-ROW YELLOW FLINT"

Grow this corn where your season is too short for the standards—in higher or medium-northern sections. Eight rows of yellow grains to ears which run 9 to 11 inches long.

"REID'S YELLOW DENT"

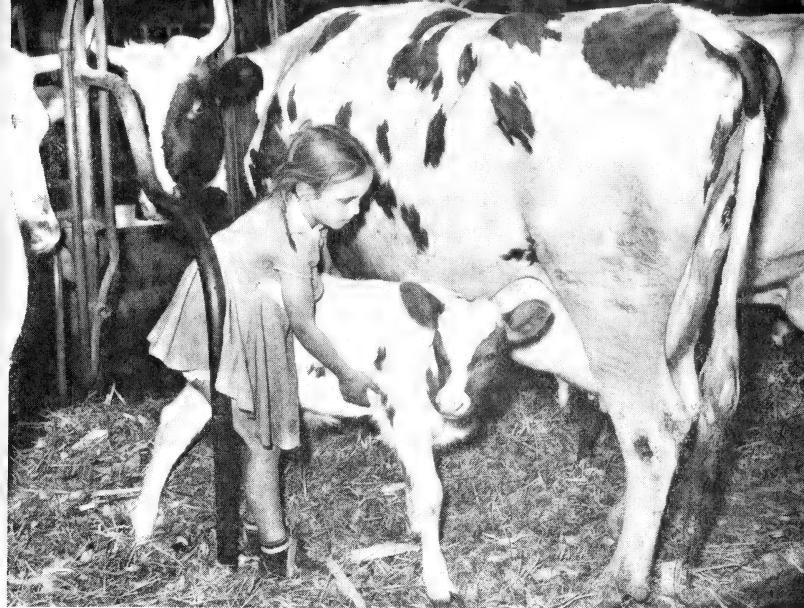
If this is the variety you want—practical yellow corn that turns in good crops—we have good seed ready for you. Grows successfully from Southern Pennsylvania south, except in higher altitudes. Ears are compact, with a thin, red cob and deep yellow grains. Regular rows set closely.

"RED COB WHITE ENSILAGE"

Special Virginia-grown ensilage corn that produces sweet, tender, juicy feed. Big tonnage producer, stalks have short joints, plenty of leaves. It grows a white corn on a red cob. Give good hard ears in long seasons.



Even little sister tends to her part of the daily farm work. This young lady sees that the junior members of the dairy herd attend meals regularly. Everybody, today, is pitching in . . . and America's farm job will be done!



"WEST BRANCH SWEEPSTAKES"

Grows dependable fodder. It also fills cribs where the season is long enough. It will never take a prize—ears run all colors from red to yellow, but some dairymen like it for silage feed.

"EARLY CLARAGE"

Produces crops of good hard corn in medium northern sections. Really dependable as an early variety. Ear is of nice type, rich golden color.

"EARLY BUTLER"

A good corn for northern sections. Ears aren't large, but you'll get a crop. Our seed is true strain, and you can count on it.

★ ★ ★

FOR EVEN GREATER YIELDS, TREAT YOUR SEED WITH "SEMESAN JR."

You can increase corn yields 5 to 15 per cent—simply by treating seed with New Improved Semesan Jr. before planting!

Tests on 45 farms showed increases up to 8 bu. per acre with treated seed.

You've noticed in your own fields how some plants are stunted as compared to others. This is largely the result of attacks on the germinating seed by fungi and molds.

New Improved Semesan Jr. CONTROLS diseases before they get a start. Checks seed, root and stalk rotting. Plant earlier with greater safety. Treatment is easy. Simply mix the dust and seed together for 2 or 3 minutes. Costs about 1½ cents to 2½ cents per acre. 2 oz. treats 1 bu.

Food for the family too— HOFFMAN SWEET CORN

There is no certainty, as this is written, as to what percentage of our contracts for Sweet Corn seed will actually be supplied. . . . But stocks will be very short. Please consult price list, which will offer whatever types can then be furnished.

"CROW REPELLENT" STOPS BIRDS FROM PULLING YOUR CORN

Has been used successfully for over twenty years. In terms of results, this "crop saver" is more effective and economical than any other material. Costs 7 to 10 cents to use per acre, and it's easy to apply—a mighty small cost to protect your crop.

Not only does it eliminate damage by crows, blackbirds, woodchucks, squirrels, and other corn-pulling birds and animals. It protects seed from rotting, insures larger yields, saves cost and labor of replanting. Doesn't clog the planter. Non-poisonous.

1-quart size—enough for	
4 bushels of seed corn.....	\$1.75
1-pt. size—enough for	
2 bushels	1.00
1/2-pt. size—enough for	
1 bushel60

(Postage paid to your address)



The young member of the family also pitching in . . . to help dad care for his fine Ayrshires. Timothy, helping along with the other grasses, is doing a heavy part of supplying today's much-needed hay. Clean hay, free from weeds, and a sizable crop of it, too—has resulted year after year, to the users of Hoffman "Farmers' Choice" Timothy seed.

Hoffman Timothy "Farmers' Choice" Seed

One farm crop for which there seems to be enough seed available is Timothy. In a way, that's both fortunate and unfortunate. Timothy is so useful in so many places that it's a good thing there is plenty of it. On the other hand, with other grasses so scarce there will be a tendency to load the grass mixtures too heavily with Timothy. On the advice of competent agricultural authorities, don't do it. Too much Timothy provides strong competition that crowds out the other grasses and just defeats your original purpose in mixing.

Timothy, however, is particularly useful in many other directions just now. For patching a thin stand of Alfalfa, for instance, it is ideal. Seed it right after the last cutting and you can get one or two more good years out of your alfalfa stand. The two go well together in the feeding, also. In fact, they should usually be together. If you are sowing Alfalfa this spring, add two or three quarts of Timothy per acre to help prevent heaving and help the legume resist winter kill.

Timothy is usually thought of for hay. In this connection, note the suggestion on cutting Timothy on page 10. When cut too late, Timothy not

only loses protein value and digestibility but becomes too dry. While Timothy doesn't recover very quickly in grazing, it has a place with other grasses in the pasture and poultry range. For chickens, the authorities rate it right up front in palatability, nutritional value and resistance to wear.

Now, of course, there is Timothy and Timothy. For over thirty years we have been getting our Farmers' Choice brand from special sources that have never failed to produce plump, vigorous seed. And we get the pick of the crop. In all those years it has been consistently around 99½ percent pure, free of all noxious weeds.

This thoroughly cleaned, vigorous seed has been responsible for the big hay crops and long lived stands that so many Hoffman friends report. Tough rooted, grows in stools, and does not send out runners. For around four years it continues to produce crop after crop of hay, but it can't stand pasturing too long. Timothy is such a valuable seed in so many places you'll want to have it on hand. Get the seed that has proved its ability to get results—Farmers' Choice.

Hoffman Rye Grass

This grass has proved so valuable as a cover crop that lots of folks have overlooked its possibilities for pasture and hay.

One use which offers big possibilities this spring is its ability to provide quick pasture. It grows quickly, withstands close grazing and recovers quickly. Some folks claim it is excellent mixed with clovers for high altitude pastures. Six or eight pounds of Rye Grass can be used, also as a nurse crop, instead of oats, and should be ready to pasture in two months. In Southeast Pennsylvania and South, rye grass can be used in oats to make a good pasture after the oats are removed.

It is also used to sow with other grass seeds in the spring. Its habit of quick growth not only gets pasture faster, it nurses along the slower starting, more permanent grasses. Note in the table on page 26 how widely it is used.

Many farmers have not yet realized its possibilities for hay. On good soil, with favorable conditions, it will grow two to three feet the year after sowing. Cut when young and tender, its feeding quality is equal to that of Timothy.

Sow only 20 pounds per acre in corn immediately after last cultivation, or truck crops—about 25 to 35 pounds per acre if you sow later.

* * *

Important Wartime Livestock Feed

Rye grass makes acceptable forage for pigs as well as other farm animals, provided supplementary protein is supplied in the grain ration.

Satisfactory growth will be obtained if pigs on rye grass pasture are full fed at least a 12 per cent protein mixture. Slow but inefficient growth will be obtained if a shortage of high-protein feeds restricts the concentrate mixture to corn and minerals.

In feeding trials, pigs on rye grass pasture gained 1.14 pounds daily when full fed a 12 per cent protein ration (corn 87.5 pounds, tankage 6 pounds, soy bean oil meal 6 pounds, and salt .5 pound).

Besides the great cover crop it provides, here's another fine use for Rye Grass. This picture (by U. S. Soil Conservation) shows how Rye Grass actually stopped soil erosion . . . see the winter wash-damage above, the section where the Rye Grass seed was not sown . . . and no damage at all in the foreground.



For QUICK summer hay, Hoffman Sudan Grass seed has often come to the rescue. Makes heavy growth in a short time. Read article below. This field of fine Sudan is being turned under to be followed by Alfalfa.

Hoffman Sudan Grass

This quick-growing annual has been especially valuable to dairies because of its ability to produce green pastures in the pinch. This year, however, seed is extremely scarce, and our chief concern has been to find suggestions that will help you make the small amount of Sudan stretch further to meet your feeding needs.

The authorities' best recommendation is the mixing of Sudan and Soy Beans for green feed. Sow a bushel of Soys with 10 to 12 pounds of Sudan. You can mix the Sudan with the fertilizer if you wish and save one trip over the field. Use this as green feed. If you wait to cut for hay, the Sudan gets too tough. Millets are also suggested in place of Sudan—in fact, for Northern Pennsylvania Millets are better.

For straight Sudan hay (about equal in value to Timothy) authorities suggest a lighter sowing to spread the supply further—12 to 15 pounds per acre. It grows quickly—is often ready to cut fifty to seventy days after planting, ready to recut in another fifty days. It is all leaf, no stem, growing 5 ft. or taller, stools remarkably and stands up well.

Some farmers sow Winter Rye in the fall, and pasture it until April, then sow Sudan on the same ground for continuous pasture until fall. It is advisable to sow heavier for continuous pasture. As an emergency crop, it can be seeded from corn-planting time up to August, and we've shipped many an emergency order in June to provide late summer pasture in dry years. Don't feed Sudan after leaves are frosted.

We'll continue to list Sudan on the price list as long as we have seed.

More Milk - More Pounds of Meat ... Hoffman Pasture Grasses

The continued shortage of good legume seeds and the urgent need for good pasturage emphasize the importance of the material on these next three pages. Here you will not only find descriptions of good grasses but suggestions that will help you get the most out of your pastures in milk checks and live stock weight.

Before you buy grass seed, study this information. It will save you dollars of seed cost and earn many more dollars. All the mixtures shown are based on good, clean seeds, of sound germination. Don't expect to get results without high quality seeds. You can depend on Hoffman Seeds being clean and full of vigor. In so important a department of your farm, you want to depend on "Quality" seeds, especially this year.

HOFFMAN "PERMANENT HAY AND PASTURE MIXTURE"

This is our own mixture, blended after long observation of the growth characteristics of various grasses all over our territory. Used on thousands of farms with splendid results. We have two mixtures—the *Highland Mixture* for well-drained, hilly land, the *Lowland Mixture* for low, wet meadows. Both are made up of pasture grasses, carefully selected and blended in proper proportions to give you a heavy, lasting stand. They contain Blue Grasses, Red Top, Orchard Grass, some Timothy, proper proportions of Clovers and Fescues or Rye Grasses. Sow either spring or fall, about 1 bushel (32 pounds) to the acre. Be sure to indicate whether you want Highland or Lowland.



KENTUCKY BLUE GRASS

The leading pasture grass for good soils, and perhaps the hardiest of perennial grasses in most Eastern sections. Prefers sweet soil for top results, and responds quickly to applications of phosphate and lime. Rarely exceeds two feet. Sow 30 to 35 pounds per acre. A slow grower, therefore best sown with quicker-growing seeds. These take hold and are replaced by the Kentucky Blue to form a tough, permanent sod. Fine on sharp slopes and for our limestone valleys. Tops for grazing and nutrition.

CANADA BLUE

Shorter, coarser, faster growing than Kentucky Blue—good on poor, rocky soil where Kentucky won't grow.

RED TOP (Herd's Grass)

A very useful, medium height perennial grass, with a creeping habit of growth. Four main uses—(1) as wet or sour land crop, (2) for pasture mixtures under humid conditions, especially on soils other than limestone, (3) as soil binder to combat erosion, (4) for hay mixtures. Grows on lime-starved soils that won't support other grasses. Vigorous, drought-resisting, it makes a coarse, loose turf. Matures about same time as timothy.

ORCHARD GRASS

A very hardy, tall, leafy grass, popular for pasturing. Grows most anywhere, all types of soil. Very early and lasts late. For hay sow heavier and cut just as it blooms for best quality and yield. Hay quality also is improved when sown along with Tall Meadow Oat Grass and Meadow Fescue.

Perennial Rye

The rye grass which lasts through many years. Good, quick, rich grazing—can be cropped close. Grows on any soil not too wet. Relished by livestock. Supply short.

Good pasture management brings fine grazing to the stock on the Buck and Doe Run Farms, Chester County, Pa., where Hoffman Seeds have been used for many years. (Photo by U. S. Soil Conservation Service.)



PHENOTHIAZINE EFFECTIVE IN CONTROL OF SHEEP WORMS

Tests have shown that phenothiazine is a more effective chemical for use in the control of worms in sheep than nicotine, tetra chloroethylene, or a combination of copper sulphate and nicotine. The phenothiazine was administered as a drench and as a salt lick. When given in salt, the mixture was in the proportion of one part phenothiazine to nine of salt and was an effective anthelmintic in 31 out of 32 ewes and lambs treated in one test. In another trial, a phenothiazine drench was efficient in heavily parasitized lambs. The reduction in parasites was maintained by the salt mixture.

Much labor can be saved in giving this remedy. Phenothiazine has the added advantage of being effective against the nodular worm, a parasite which spoils the small intestines of sheep for use as surgical sutures, a product much in demand in wartime.

MEADOW FESCUE

Often called English Blue. Grows almost anywhere, but best in low, damp locations. Is hardy, early, 2 to 3 feet high. Stands dry or freezing weather.

TALL MEADOW OAT GRASS

Great for poor but well-drained soils, especially when sandy or gravelly. Very hardy, perennial, highly nutritious. Pasture is ready early in spring and lasts late into fall. Hay yield is heavy when cut about blossom time. Tall, fast-growing. Deep rooted, cold and drought-resister. Up to 60 inches high, in tufts. Good with Red Clover, Alsike and Orchard Grass.

Poultrymen who have provided satisfactory ranges for growing chickens and turkeys have reported savings of feed and cost reductions because grass contains many important nutrients.

Green, succulent, tender grass is a good source of vitamin A, riboflavin, and other water-soluble vitamins. Furthermore, clover and blue grass range furnishes protein, calcium, and phosphorus. An analysis of 25 per cent protein on a dry basis has been found in samples from good poultry pastures in Pennsylvania.

A bulletin covering seeding, fertilizing, managing and improving poultry ranges (Leaflet 79, April 1943) is available from School of Agriculture, Agricultural Extension Service, State College, Pennsylvania. It will pay you to write for this bulletin.

BIRDSFOOT TREFOIL

This legume is extensively scarce this year. Low-growing, perennial, stout root, bearing numerous slender spreading branches 6 to 18 inches long. Its main use has been for sowing into pastures. Starts slowly. Lasts longer through the season too. Valuable on moist or somewhat heavy soils. Has thrived on ground too poor for alfalfa. If available will be listed on price list.

SMOOTH BROME GRASS

A fall perennial with strong creeping root stocks that build a thick, firm turf. Thrives well on loose, dry soil, withstands drought unusually well. Slow to start, it is desirable to sow it with a nurse crop or with other grasses, especially when grown for hay. Sow early in the spring or late summer (about two months ahead of frost to be sure of a start). In some areas this grass is used with alfalfa to produce abundant hay and pasture, especially during the heat and drought of July and August. Some folks claim this mixture seems more productive—in milk and butter fat records—than alfalfa alone. This practice is spreading farther into the East.

TALL (ALTA) FESCUE

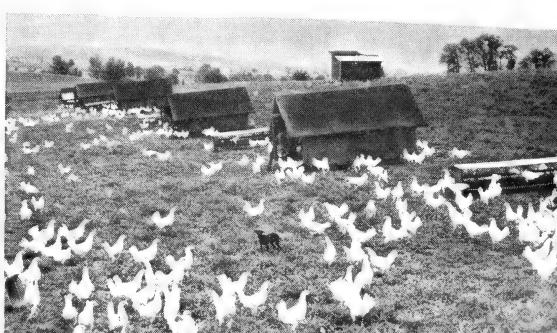
Differs from meadow fescue, mainly in growing 6 to 12 inches taller somewhat looser panicles. Yields larger crops of hay. At the Ohio Experimental Station, tall fescue produced in 4 years on 1/20 acre plots an average yield of 4,870 pounds of hay per acre.

CREEPING RED FESCUE

This is the true creeping type. A very fine shade grass. Produced in northwestern Canada in a very cold area. Hardy tested, sound, strictly No. 1 seed.

CRESTED WHEAT GRASS

A long-lived, leafy, perennial bunch grass; very drought-resistant. Withstands extreme cold. Early, long-season pasture. Grows 24 to 30 inches high, on almost any type of soil. Drill 12 to 16 pounds per acre—broadcast 20 to 25 pounds.





It costs three or four times as much to feed a milk cow in the barn as to feed her on a good pasture, which will replace during the pasture season all the hay and silage and much of the grain in the dairy ration. An abundance of good pasture will not only be more profitable, but will conserve vitally needed grain. Good pasture also protects and builds up the soil.

The vitamin A content of milk can be maintained at a high level by pasture feeding.

Hay Dry Enough to Bale If Ready To Be Stacked

Contrary to common belief of farmers, hay that is ready to go into the mow or stack may be baled in the field without excessive danger of spoilage.

The results of studies indicate that hay with a moisture content of 25 per cent or less may be baled in the field in 16-by-18-inch bales containing not more than eight pounds per cubic foot without danger of spoilage if stored immediately. Bales 36 inches long of this size weigh 45 to 50 pounds and are rather loosely compressed. Farmers are accustomed to judging this moisture content, as it is the condition at which they commonly store loose hay, and usually can do it fairly accurately.

Hay with a moisture content of about 28 per cent had a tendency to discolor and become dusty in the bales.

★ ★ ★

Better Cattle Feed

It is possible to disk up permanent pasture to work in lime and phosphate and make a seed bed for legumes without destroying the grass stand.

Blue grass cut up with a disk soon has proved thicker and more vigorous than that which had not been worked. On treated ground it grew rank and leafy, was dark green in color and soon smothered out weeds. The treatment was still effective after 4 years and was 4 times as productive as an untreated acre.

GRASS MIXTURES TO MEET SPECIFIC NEEDS POUNDS OF EACH KIND OF SEED FOR EACH ACRE

	RYE GRASS	LADINO KENTUCKY BLUE GRASS	CANADA BLUE GRASS	RED TOP	WHITE CLOVER	WHITE SWEET CLOVER	ALFALFA	ALSIKE	ORCHARD GRASS	TIMOTHY	MEDOW FESCUE	RED CLOVER	RAPE	
To improve old pasture	10	2												Lime and fertilize. Broadcast or seed with disc drill, follow with Culti-Packer. Do not use for new pasture—not properly balanced.
Poultry Green Feed	10	2	6	4	2	1								Sow late summer, like alfalfa. Needs frequent clipping. Normal stand will carry 500-700 pellets.
First-year Pasture		2					4	4	2	5-8				Sow early in spring with disc drill, follow with spike tooth harrow.
Triple Purpose Pasture		1								5	*4	4	4	For Hay, Pasture or Grass Silage. Sow this on crop land for a rich stand.
Add for poor, wet soil								3						*Plant Timothy in fall, with winter grain.
Add for fertility, well drained							5							Exceptionally nutritious and long lasting. Best for high production from limited areas.
Add for sowing without grain nurse crop						6		1						Get several more years' value out of old disused alfalfa stands.
Add for more than 3-year stand, as straight pasture		5												Turkeys thrive on this mixture.
High Production Pasture	5	3	9							9	4			Suitable for pasture following two hay crops.
Add Alfalfa for Pasturing		2						8						For that wet spot in your hay field.
Turkey grain feed	10											2		Very good general purpose mixture.
2-year hay followed by pasture			4	2	4	1			5	6				2 to 5 pounds Orchard Grass is optional in this mixture.
Hay from heavy, damp soils					6			4	4					
Basic Permanent Pasture Mixture	8	1				1		2	4					
Add for low, moist places					2			2						
Add for good average conditions				2										
Add for poor, dry conditions					2	2						4		

With automatic mixers, Hoffman can properly mix any of the above, or your own formula, to provide uniform distribution.

Hoffman Seed Potatoes

The market for potatoes should continue excellent over several years. In dehydrated form potatoes are being sent all over the world to feed starving peoples as well as our own soldiers. Yes, you'll have a market—make sure you have the potatoes by planting good, healthy, true-variety seed on well-fertilized ground. Plant Hoffman Seed.

"IRISH COBBLER" (Certified)

Of this old reliable we are able to offer you extra-fine Maine-grown seed. A fine, early, heavy-yielding potato. Delicious, mealy. Shallow eyes. Stores well. Popular favorite.

MICHIGAN "RUSSET" (Certified)

A hardy grower, easy to harvest and store, resistant to many diseases. The iron-clad rules of the Michigan State College inspection service protect you when you buy this seed. Our seed is produced by famous Tuber-Unit method that removes everything undesirable. Once gave a yield of 629 bushels per acre in Bucks County, Pa.

"KATAHDIN" (Certified)

A very mealy variety. Oval-shaped—very smooth—shallow eyes. Matures a little before "Green Mountain." Fine yielder. Vines dark green—thick, heavy foliage. Popular.

"SEBAGO" (Certified)

One of the newer varieties from Maine; late and blight-resistant. If sprayed will continue to grow until the frost gets them, consequently a greater yield of fine-appearing tubers. Many reported that Sebago lived through the dry weather to make good crops after the late rains.

"GREEN MOUNTAIN" (Certified)

One of the best-liked standard potatoes grown, very finest in eating qualities. A later-maturing Maine-grown seed—with many friends.

For More Potatoes Treat Your Seed With "SEMESAN BEL"

You can't get good yields from disease-weakened plants. Even the best seed can be affected by some of these soil-borne diseases. "Semesan Bel" offers you easy, low-cost control of Rhizoctonia, scab, and other soil-borne diseases.

Results are remarkable. Practical applications show an average increase in yield over a period of years of about 10 per cent. Yet it costs so little—2 cents per bushel, one pound treating 60 bushels. Simply quick-dip in solution and plant.

Don't let disease rob you of potato profits. Treat ALL seed, including certified.

Fertilizer for Potatoes

Potatoes will usually pay for liberal fertilization. With manure and a good legume sod turned down, apply 600 to 800 pounds of a 4-10-10 or 4-12-12 or 160 to 200 pounds of plant food in a 1-2-2 ratio. Without manure the 1-2-2 ratio furnishing 200 to 240 pounds of plant food, such as 1000 to 1200 of 4-8-8, seems best. For early potatoes the total plant food might be increased to 240 or 260 pounds using the 1-2-2 or a 1-2-1 ratio, such as 1,200 to 1,500 pounds of a 4-10-5.

★ ★ ★

To Guard Against Late Blight

Spray early and late with bordeaux mixture. That means early as soon as the rows can be seen and at weekly intervals as long as the vines are alive. Bordeaux mixture is made with 8 pounds of bluestone and 8 pounds of lime, hydrated or burned, and 100 gallons of water.

A program of continuous and thorough spraying with bordeaux mixture insures the grower against late blight and promises the best crop that conditions will allow.

★ ★ ★

Cover Crop to Save Labor in Orchard

A mixture of crimson clover and winter vetch with a light addition of millet or rye as a nurse crop has given encouraging results. This is not worked down until the crimson clover is past full bloom and much of the dead cover is left on or close to the surface of the soil. This makes the soil so loose the new seeding must be firmed. Soil should be firmed by using a cultipacker.

Rye grass makes an excellent ground cover, but must be used with caution in the peach orchard as it will check tree growth if not worked down at the proper time.



Where Hay Is Scarce, Pastures Are Short Summer Forage Needed, Spring Crop Failed

"JAPANESE" MILLET

Known as the "Million-Dollar Grass." Has made up to 20 tons per acre. A tall variety. Thrives on poor soil. Valuable hay. For green feeding, cut just before seed heads appear. Sow ½ bushel per acre (32 pounds per bushel).

"GOLDEN" MILLET

In Pennsylvania yields a heavy crop in from seven to nine weeks. Makes satisfactory hay of leafy character. Sow 3 pecks per acre. 48 lbs. to bu.

"HUNGARIAN" MILLET

Preferred by many farmers because of its dependability under northern conditions. 48 lbs. to bu.

"HOG" MILLET

(Sometimes called Broom-Corn Millet)

Large, heavy-growing type. May be used in silage. Seed yield is heavy, has reached 50 to 60 bushels per acre. Seed has been fed to hogs and young cattle with satisfactory results. Got its name because seed was thought so well adapted for feeding hogs. Seed makes good poultry food, too.

"KOREAN" LESPEDEZA

Thrives on lands too poor for other Clovers. Popular from Maryland south as soil enricher. An annual legume, killed by frost, but often reseeds itself. Great drought resister. Has produced heavy tonnages in South. Sow 20 to 25 pounds per acre. Be sure to inoculate.

"SERICEA" LESPEDEZA

Perennial strain of "Lespedeza" yielding finer hay. Taller. Not only thrives on poor soils and in dry seasons. Cuts reseeding cost. Lasts several seasons.

COW HORN TURNIP

Improves soil and provides forage tops relished by sheep, hogs and poultry, when sown in corn fields. Turnips penetrate deeply, bring fertility to surface and add humus to soil. Sow 2 to 4 pounds per acre.

HOG PASTURE MIXTURE

For 11 Weeks' Hog Pasture at Low Cost

Quickest growing green hog-feed mixture—often ready in four weeks. Valuable as an emergency pasture when other earlier crops have failed. Grows until frost, but will not winter. An abundant producer of flesh and fat, also of wool. For cattle, cut and haul to barn to prevent trampling. Second growth will then appear. Plant 70 pounds per acre, broadcast or with seeder, between June and August 1. Then harrow in.

ATLAS SORGO

Recently very popular in Hoffman territory. Makes strong stalks that don't lodge easily, like most all other tall types do. Sweet juicy stalks combine the desired qualities of a sweet forage Sorghum with strong stalks . . . and with seeds that may very readily be used as a grain feed.

Plants are about ½ inch thick and grow 7 to 10 feet high. Harvest when the seeds are in the hard-dough stage, using either a field ensilage cutter or a corn-row binder. Unless dry, seed shallow. Use corn planter with Sorghum seed plates available from planter manufacturer. Cultivate same as corn.

Atlas Sorgo plants show a remarkable ability to remain green but dormant through long periods of drought, and then resume growing when rains occur.

GRAIN SORGHUM (NON-SACCHARINE)

Well worthy of consideration. Kaffir, Milo, Hegari and Feterita yield heavily in both forage and grass. The whole plant may be fed, either green, cured or ensiled. Unthreshed heads may be fed whole or ground—or threshed and the grain fed separately. Analyses of the grain indicate they are very similar to Corn in composition. Corn, however, contains more fat. Some Sorghums are high in protein. Amount of carbohydrates in the two crops is practically equal.

SORGHUM CANE (SACCHARINE)

These canes carry a sugar content and are valuable for cattle feed as green forage and as ensilage. Hoffman offerings may consist of the Amber and (or) Orange type of Sorghum. See price list.

COW PEAS

Fine for pasture or hay, turning under or hogging down, on poor soil. Best in South, since Cow Peas dare not be planted early. Handle like Soy Beans. Inoculate. For Hay or green feed, sow 1 bushel with 3 pecks Golden Millet to the acre, cutting when in bloom.

"CANADA PEAS" FOR HOG FEEDING

(See description on page 6)





Now that every pound of food counts, don't waste good seed or valuable fertilizer by letting them wash off your fields. Strip-farming on the contour helps prevent loss of seed, fertilizer and top soil too; utilizes maximum moisture to grow crops; brings increased yields.

The modern streamlined farm pictured above belongs to Harry W. Huffnagle, lower Lancaster County.

Photo: Soil Conservation Service. In sight are corn, peas, tobacco, alfalfa, tomatoes and wheat stubble grass. Strip-farming makes it easy to work out rotation.

When crops are grown on the contour, across the slope, each furrow acts as a small dam which holds rain water and prevents soil, seed and fertilizer from washing away. Then, too, it takes less power and less fuel to follow a level contour than to plow or cultivate up and down hill.

HAIRY (WINTER) VETCH

Excellent green feed when cut in full bloom, as hay when pods are about half formed, or as green manure when seed is inoculated. Very good on sandy soils, or where Red Clover fails.

Because of great length of Vetch plants, plant along with small amount of grain, such as wheat or rye. This very hardy strain is a biennial, or winter annual. Usually sown in late summer or early fall. Be sure to inoculate.

SPRING VETCH

Not winter-hardy, but often used successfully among spring pastures. Cost is lower than the hairy winter variety. Makes good growth when planted in the spring.

★ ★ *

Corn Fodder for Green Feeding

Two corn sources of green feed are available for emergency use this summer. Sweet corn fodder, while it does not bulk, may be cut immediately after the corn is picked and fed very early in the summer—and cattle like it.

Regular field corn "sowed" in rows (about a half bushel of seed per acre) should be ready for dry fodder or green feed within six weeks of planting. When a shortage is in sight, this planting may be made as late as July 1 to furnish food by the middle of August.

Keep an eye on the feeding needs ahead of you. By the use of such "pinch" crops in the corn fodder mentioned above, and other items covered on these two pages, you can have feed when your stock will need it, regardless of unsatisfactory weather.

★ ★ *

Insurance for crop success with alfalfa has been the good fortune of the thousands of Eastern farmers who depend on Hoffman Alfalfa seed. You too can rely on its importance in your increased production program.

RAPE . . . FOR QUICK PASTURE

An inexpensive and prolific pasture for sheep and hogs. Thrives on all soils with little preparation. Sow about 5 to 6 pounds of seed per acre, through spring up to end of August. Alone, with other pasture seeds, or in corn fields. Makes second growth. Open to pasture when less than 10 inches high. Stands hard usage. Easy to grow.

"CRIMSON" (SCARLET) CLOVER

Valuable winter cover crop. One user claims it "equal to 20 loads of manure per acre." Grows on soil too poor for Red Clover. Fine in orchards or corn fields. Be sure to inoculate. Seed 20 pounds per acre June to late August. Matures following June. Best in South.

STOCK BEETS . . . FOR SUCCULENT FEED

Where there is no silo—here is a source of good succulent feed to note. There is something in such feed—silage, pasturage and root crops, that helps cows milk heavily, keeps ewes thrifty and makes good mothers of them, and enables hens to handle feeds to better advantage.

Seed Stock Beets soon as soil warms in spring. Six to 8 pounds per acre in drills—2 to 2½ ft. apart. Thin plants to stand 8 inches apart. Cultivate frequently and shallow. Fertilize. Yield is often 8 to 10 tons per acre! Dug at frost and tops removed. Store in cone-shaped piles, at well-drained spot near barn. Cover with straw and dirt. Feed from such pits all winter. At first Stock Beets may be crisp like carrots—maybe slightly tart. By mid-winter they are sweet and succulent. Chopped with heavy blade and fed with hay. "Mammoth Prize Long Red" is a heavy yielder—about 110 days. Keep well. See price list.

FARM LABOR MET THE EMERGENCY

Just one year ago the predictions about the farm labor supply were dark and gloomy. Many a man listened to the need for more acreage in more crops and said to himself, "Sure, but who's going to do the work?" . . . Harvest is over, and much to the surprise of lots of folks, there was practically no loss of crops from lack of labor.

The chief reason for this is ORGANIZATION. County Agents and state authorities were organized into a great emergency labor group. Early in the year they surveyed their needs, and set out to get the labor to fill them. The potato program in Potter County was an excellent example of intelligent planting and co-operation. Because of the potato shortage, of the 29 tractors allotted to Pennsylvania, 13 went to Potter County, which had offered to grow 2,000,000 bushels if proper equipment was available. Labor was organized into groups. There were, for instance, 15 land fitting groups which went from farm to farm plowing and harrowing. 2,500 acres of land—a job that ordinarily would have taken many times the equipment and manpower—were handled quickly by these groups. They were followed by planting groups, and still later by sprayer groups. Last came the digger groups to harvest one of the biggest potato crops Potter County ever had, 2,150,000 bushels with a value of \$2,700,000. It is estimated that this grouping probably saved over 200 steady farm workers, and did the job with a fraction of equipment ordinarily used. At the same time, Potter County farm operators found time to increase dairy herds by 15%, double poultry production, up hog production by 500%, and increase beef and veal by 35%. (The small picture on opposite page shows the allotted equipment in Coudersport during organization day.)

During 1943 the Pennsylvania authorities recruited over 50,000 workers, and out of these volunteers 1,200 stayed on the job to become year-round farm workers. Practically all of this—as in other states too—was local volunteer help. Each county attempted to take care of its own situation,

To get a big job done, everybody works on the Loy farm (Perry County, Pa.). Here is the milking group doing its part while other members are busy elsewhere.



Bank clerks, business men, their wives, workers in other industry . . . took some time off from their regular lines to help farm-food-producers. And the job got done! This picture was taken in Cumberland County, Pa., when a group of laborers was imported, some from the Southern states—some from Jamaica—to help harvest the bean crop.

but in emergencies labor was moved from county to county. Thus a bus load of workers was sent from Allegheny to Mercer County for seasonal work and two-thirds of them stayed all summer. 500 workers went up to New York State to help with the heavy bean crop. Another large group went to New Jersey to help with tomatoes and when this season was over New Jersey volunteers moved across to help Pennsylvania farmers.

Three tremendous benefits were noted from this emergency help program. The man who could foresee a labor shortage when his crop was coming in could phone his County Agent—saving countless hours of looking for men he needed.

Uniformity of payment meant there was no competition in wages. The practice of waiting till somebody else gathered a crew and then hiring them away from him at 5 cents an hour more was conspicuous by its absence.

And the volunteer labor turned out to be surprisingly productive. At the rates normally paid itinerant harvesters, the volunteer boys and girls made better wages than were being offered in war plants—which meant they got in the crops while they were in prime condition. For the Franklin County apple crop, at regular 12 cents per bushel pay, boys were clearing \$45 to \$48 a week after paying board and all travelling expenses.

That's the story for 1943. With a year's experience, the story for 1944 will be equal or better. If you need help, get in touch with your County Agent. He may not be the man who actually handles it, but he knows who to contact to get you what you need. You might study that Potter County arrangement for use in your area, too.

★ ★ ★

CAHOON SEEDERS AGAIN AVAILABLE

Speeds up hand sowing of grain and grass. Useful on rough, steep land, and soil too soft for tractor. Send us your order. We again have these popular seeders.

FROM

Hoffman's **FARM SEEDS,**

Landisville,
(Lancaster County)
Penn.





Hoffman FARM SEEDS

LANDISVILLE, PENNA.

To our many Farm Friends:

Here is your copy of the new Hoffman Seed book . . . hope you'll find it helpful in ordering your farm seeds, and perhaps helpful in solving some crop emergency that may arise during the year.

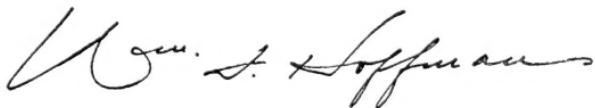
When starting to prepare this new catalog way back last fall, orders had already been placed for ample supplies of many of these seeds. Unfortunately, conditions arose over which we and our usually-dependable sources of supply had no control. Nature interfered, and once-promising seed prospects turned out to be nearly crop-failures. As a result we cannot guarantee delivery on all the seeds listed. Already the supplies of some are running very low, and it is questionable whether replacement stocks can be obtained . . . so bad is the situation all over the country.

It was a question in our minds whether we should even send out this catalog . . . with so many seeds so short. But decided that because of the helpful farm facts it contains, it might be welcomed by the majority of our friends.

Hope we will be able to take care of your order fully. But in the event that when your order does arrive, and our supply of certain seeds should be exhausted, you will understand that we have not solicited your business with any misgivings as to delivery. The intention was, and certainly still is—to go the limit to supply you.

The seriousness of the situation is appreciated, and also the inconvenience it may lead to, in the case of many of our farmer-friends. Despite the fact that we too are operating short-handed,—with a number of our boys in the Service—we want you to know that we are anxious to be of any assistance we can in this emergency.

Sincerely yours,



President

YOUR ASSURANCE OF QUALITY

You be the judge! Hoffman Seeds must be satisfactory to you on arrival. If they aren't, return promptly and your money will be refunded and all freight charges paid for the round trip. We'll even grant time for purity and germination tests, should you desire. However, while exercising every care to assure you seed of good quality, we must for our own protection submit all goods according to terms similar to those of other responsible seed firms, and as approved by the American Seed-Trade Association, of which we are members. A. H. Hoffman, Inc. "gives no warranty, express or implied, as to the productiveness of any seeds it sells, and will not be in any way responsible for the crop. Our liability, in all instances, is limited to the purchase price of the seed." If the goods are not acceptable on these terms, they should be returned at once.

FREIGHT PAID

HOFFMAN PAYS FREIGHT on every shipment of Hoffman Seeds weighing 100 pounds or more, providing your railroad freight station is in any one of these eleven states: Pennsylvania, Maryland, Ohio, Massachusetts, New Jersey, New York, Delaware, Rhode Island, West Virginia, Virginia and Connecticut.

BAGS ARE FREE

BAGS SUPPLIED FREE. When you make up your Hoffman Seed order, you don't have to figure anything "extra" for bags needed to ship seeds. Bags are free.

RAILWAY EXPRESS NOT RECOMMENDED

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3 WAYS TO PAY

1. Send payment along with your order. Most folks do. Or—
2. Mark your order "Ship by C. O. D. freight" and pay your freight agent when the seeds arrive at your freight station. This plan can be used ONLY if there IS AN AGENT at your freight station. Or—
3. Pay a draft at your bank when the seeds arrive at your freight station. In this case, mark the name of your bank on order so that necessary papers may be sent there.

If you don't send payment with order, be sure to indicate on order blank which payment plan you prefer.

SEND YOUR ORDER NOW!

You know Hoffman Seeds are Good Seeds—priced right—available at little or nothing above the per acre cost of just ordinary seeds.

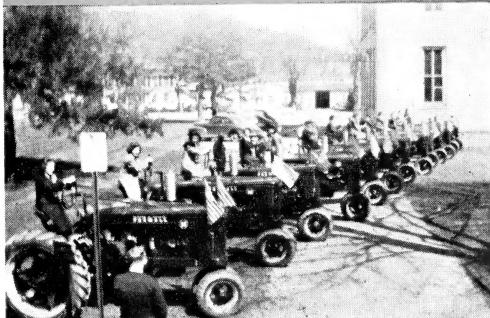
It's going to pay you this year to get your order off as soon as you can. Because that's the way to be sure of getting your seeds in one of the most upset seed years we have ever seen. Help overcome possible railroad delays. Avoid the late rush. Be wise—be safe—be sure. Sow Hoffman Quality Seeds . . . and order them shipped EARLY!

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